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GENRAD INC CONCORD MA

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TRACKING SERVOBRIDGE DETECTORS. VOLUME III. OPERATION SHEETS.(U)

DEC 76 W J RILEY, W M TWADDELL

DAAB07-73-C-0609

UNCLASSIFIED

24655-VOL-3

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1 of 2
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PRODUCTION ENGINEERING MEASURES (PEM) FOR
TRACKING SERVOBRIDGE DETECTORS

VOLUME III - OPERATION SHEETS

William M. Twadell
GenRad, Inc.
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Concord, Ma. 01742



15 December 1976

FINAL REPORT FOR CONTRACT NO.: DAAB05-73-C-0609

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Fort Monmouth, New Jersey 07703

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1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
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19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Quartz resonators; measuring-devices (electrical-electronic); crystal measurements; Servobridge detector; detectors; synchronous-detection; heterodyne-receiver.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) 5000 This report is in three volumes. - Volume I describes technically the Tracking Servobridge Detector in final configuration after passing all of the requirements of MIL-D-55361(EL). Volume II describes the Production Engineering Measures required for the pilot production of these units. Volume II includes flow charts, equipment and tooling lists, sample operation sheets, other data required for production and review of the program. Volume III contains all of the Operation Sheets required to		

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20. fabricate (GenRad manufactured) components and to assemble and test subassemblies and Tracking Servobridge Detectors.



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SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

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25		2995-4855					0485-0290

PRINTS

0485-4073-1L

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
B01 A	Cut to length and service ends 03-84-05 20 .05	Ea	S		
H20 B	Inspect				
P50					

PARTIAL QUANTITY RECORD

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0485-0295

PRINTS

0485-4074-1L

OFFICE ORDER.

R/M NO.

RAW MATERIAL DESCRIPTION

UNIT

1/0

TOT. QUANTITY

UNIT WEIGHT

0030-1240

ESMW-5-2-24

Ft	
----	--

80"

WORK STATION

- OPERATIONS -

UNIT

3000

SET-UP

PIECE RATE

B01 A

Cut to length and service ends

03-84-05

20

.05

Ea	S
----	---

S

H20 B

Inspect

P50

PARTIAL QUANTITY RECORD

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25		2995-4855					0485-4074

PRINTS

0485-4074, 4074-1L

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
36 0285	ESMW-57-28-SNP	LB			.8
36 0185	ESMW-57-18-SNP	LB			.26
36 0195	ESMW-57-19-SNP	LB			.5
0485-0295	Lead Set	Ea		1	
0485-0730	Coil tube	Ea		1	
0485-0800	Lamination	Ea		100	
0485-8160	Trans. Clamps	Ea		2	
5810-1300	Nut, Hex	Ea		2	
7840-0650	Stud	Ea		2	
7930-1800	Terminal, Locking	Ea		2	
8040-2400	Washer, Split Locking	Ea		3	
7720-1100	Spacer	Ea		2	
W15A	Wind	Ea	S		
	03-83-06 66 21.50				
W35-B	Asm Complete	Ea	S		
	03-81-04 32 5.75				
J50 C	Inspect				
P50					

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PRINTS

2994-0800

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2994-0803

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2994-0806

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PRINTS

2994-2016

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
5000-4900	Core	ea		1	
5300-3200	Winding Form	ea		1	
6084-1039	Diode	ea		1	

WORK STATION	- OPERATIONS -	UNIT	CODE	SET-UP	PIECE RATE
A10 A	Wind, adjust, and assemble				
	45	1.5	Ea S		
J15B	Inspect				
P50					

PARTIAL QUANTITY RECORD

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PRINTS

2994-2017

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
5300-4903	Core	ea		1	
5300-3200	Winding Form	ea		1	
6084-1039	Diode	ea		2	

[illegible]

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25		2994-4781					2994-2018

2994-2018

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
2995-0547	Core	ea		1	
5300-3200	Winding Form	ea		1	
6084-1038	Diode	ea		2	

[illegible]

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2994-4766-1L, 2L, 3L, 4L
2994-4766, 2D-SS, 4766

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
A25 A	Assemble and solder						
	03-81-06	50	126.0	ea	S		
J16 B	Inspect						
L01 C	Test						
	01-82-07	60	242.40	ea	S		
Tool	8986-8163 Test Fixture						
Tool	8986-8169 Power Supply						
P50							

PARTIAL QUANTITY RECORD

[illegible][illegible]

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2994-4781-1L, 2L-3L
-4781, 2D, FM

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -				UNIT	C O D E	SET-UP	PIECE RATE
A25 A	Assemble and solder	03-81-06	50	108.0	ea	S		
J16B	Inspect							
L01 C	Test	01-82-07	60	342.0	ea	S		
Tool	8986-8167 Test Fixture							
8986-8170	Power Supply							
P50								

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[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
A25 A	Assemble and solder						
	03-81-06	50	60.0	ea	S		
J16B	Inspect						
L01 C	Test. Match MEM-660 Return excess to P50						
	01-82-07	60	181.20	ea	S		
Tool	8986-8166 Test Fixture						
Tool	8986-8169 Power Supply						
P50							

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[illegible][illegible]

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2994-4786-1L

-4786, 4786-2D-GI

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
A25 A	Assemble and solder						
	03-81-06	50	66.0	ea	S		
J16 B	Inspect						
L01 C	Test and calibrate						
	01-82-07	60	61.20	ea	S		
Tool	8986-8165 Test Fixture						
Tool	8986-8169 Power Supply						
P50							

PARTIAL QUANTITY RECORD

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→	PRINTS 0485-4073, & 1L	OFFICE ORDER →
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2994-4788-1L-2L-3L
-4788, 4788-2D-IF

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
A25 A	Assemble and solder	03-81-06	50	84.0	ea	S	
J16 B	Inspect						
L01 C	Test	01-82-07	60	241.20	ea	S	
Tool	8986-8168 Test Fixture						
Tool	8986-8168 Power Supply						
P50							

PARTIAL QUANTITY RECORD

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WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
B01 A	Cut to length & service ends						
	03-84-05	35	5.0	Ea	S		
B73 B	Asm						
	03-81-04	5	15.0	Ea	S		
H20 C	Inspect						
B01 D	Braid						
	03-84-05	45	7.0	Ea	S		
J20 E	Inspect						
P50							

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PRINTS

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0030-3249	ESMW-5-2L-24	Ft		1000"	
4230-4024	Connector	Ea		1	

WORK STATION	- OPERATIONS -	UNIT	CODE	SET-UP	PIECE RATE
B01 A	Cut to length & service ends				
	03-84-05 35 4.5	Ea	S		
B73 B	Asm				
	03-81-04 5 11.0	Ea	S		
H20 C	Inspect				
B01 D	Braid				
	03-84-05 65 9.0	Ea	S		
J20 E	Inspect				
P50					

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PRINTS

2995-0284

OFFICE ORDER

[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
B01A	Cut to length & service ends						
	03-84-05	20	3.0	Ea	S		
B73B	Assemble						
	03-81-04	5	2.5	Ea	S		
H20C	Inspect						
B01D	Braid						
	03-84-05	55	9.0	Ea	S		
J20E	Inspect						
P50							

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25		2995-4855					2995-0370

2995-0370

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-2300	ESMW-93	Ft		11.5"	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	

[illegible]

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[illegible][illegible]

OPERATION SHEET

DUE DATE: _____

→	PRINTS 2995-0371	OFFICE ORDER →
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[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
B01 A	Cut to length & service ends						
	03-84-05	25	15.0	Ea	S		
B73 B	Asm						
	03-81-04	10	6.0	Ea	S		
H20 C	Inspect						
B01 D	Braid						
	03-84-05	50	4.5	Ea	S		
J20 E	Inspect						
P50							

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2995-0373

OFFICE ORDER →

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25		2995-4855					2995-0379

PRINTS

2995-0379

OFFICE ORDER-

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1700	ESMW-86	Ft		13.8"	
	ESMW-30-24	Ft			

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25		2995-4855					2995-1840

→	PRINTS 2995-1840	OFFICE ORDER →
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R/M NO	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
1165-0400	Eyelet	Ea		2	
1165-7000	Insulator	Ea		2	
1165-8000	Spring Clip	Ea		2	
1165-8010	Spring Clip	Ea		4	

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PRINTS

2995-1840

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
1165-4000	Eyelet	Ea		2	
1165-7000	Insulator	Ea		2	
1165-8000	Spring Clip	Ea		2	
1165-8010	Spring Clip	Ea		2	

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
B70 A	Asm and swage						
	02-82-04	10	2.00	Ea	S		
Tool	8986-2817 Punch and Anvil						
H20 B	Inspect						
P50							

PARTIAL QUANTITY RECORD

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25		2995-2872					2995-1842

PRINTS

2995-1840

OFFICE ORDER.

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
1165-0400	Eyelet	ea		2	
1165-7000	Insulator	ea		2	
1165-8000	Spring Clip	ea		2	
1165-8010	Spring Clip	ea		4	

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2995-1840

OFFICE ORDER →

R/M NO	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
1165-4000	Eyelet	Ea		2	
1165-7000	Insulator	Ea		2	
1165-8000	Spring Clip	Ea		2	
1165-8010	Spring Clip	Ea		2	

WORK STATION	- OPERATIONS -			UNIT	CODE	SET-UP	PIECE RATE
B70 A	Asm and swage	02-82-04	10	2.00	Ea S		
Tool	8986-2817 Punch and Anvil						
H20 B	Inspect						
P50							

PARTIAL QUANTITY RECORD

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2995-1860

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
10 4210	AL. 1 5/16 Dia 2011 T3	LB			
7250-0554	Set Screw	Ea		1	

WORK STATION	- OPERATIONS -	UNIT	CODE	SET-UP	PIECE RATE
M80 A	C'Bore & .250 Dia 02-83-06 40 2.20	Ea	S		
M02 B	Drill & Tap A77 02-83-04 17 .70	Ea	S		
Tool	8986-8177 Drill Fixture				
E12 C	Groove 04-83-05 30 .40	Ea	S		
M88 D	Clean 04-82-04 5 5.00	Ea	S		
N25 E	Finish 04-84-06 16 1.60	Ea	S		
E12 F	Fill 04-83-05 10 .25	Ea	S		
H82 G	Inspect				
P50					

PARTIAL QUANTITY RECORD

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ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-1865

PRINTS

2995-1865

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
21 1117	Phen. .062 XXS BK	LB.			.01
II60-6016	Spacer	Ea		4	
7976-2200	Terminals	Ea		15	
5170-0750	Eyelet	Ea		15	

[illegible]

PARTIAL QUANTITY RECORD

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DUE DATE: _____

[illegible]

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L

PAGE

ITEM NUMBER

25

PRINTS

2995-1867

OFFICE ORDER

R/M NO.

RAW MATERIAL DESCRIPTION

UNIT

1/D

TOT. QUANTITY

UNIT WEIGHT

2995-0543

Lens Cap

Ea

1

WORK STATION

- OPERATIONS -

UNIT

CODE

SET-UP

PIECE RATE

E12 A

Engrave

04-83-06

30

.40

Ea	S
----	---

S

H70 B

Inspect

P50

PARTIAL QUANTITY RECORD

[illegible][illegible]

OPERATION SHEET

DUE DATE

ORDER QUAN	DRAFTING NO.	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-1870

2995-1871

OFFICE ORDER

[illegible]

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
E12 A	Disassemble cap from switch, engrave, and reassemble 04-83-06 50 .60	Ea	S		
H70 B	Inspect				
P50					

PARTIAL QUANTITY RECORD

[illegible][illegible]

OPERATION SHEET

DUE DATE

ORDER QUAN	DRAFTING NO	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
75		2995-4855					2995-1875

PRINTS

2995-4855-8L
2995-1875

OFFICE ORDER————→

[illegible][illegible]

PARTIAL QUANTITY RECORD

[illegible][illegible]

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START DATE:

DUE DATE

ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2994-4765

PRINTS

2994-4765-1L & 2L

2994-4765 & 2994-4765-2D-V, 1 & 2

OFFICE ORDER[illegible]

WORK STATION	- OPERATIONS -			UNIT	CODE	SET-UP	PIECE RATE
A25 A	Assemble and solder						
	03-81-06	50	96.0	ea	S		
J16 B	Inspect						
L01 C	Calibrate						
	01-82-07	60	302.40	ea	S		
Tool	8986-8164 Test Fixt.						
P50							

PARTIAL QUANTITY RECORD

[illegible][illegible]

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START DATE: _____

DUE DATE: _____

ORDER QUAN	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-1880

PRINTS

2995-4855-7L
2995-1880, 2995-8887/A

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
10 1266	AL .063X36X48 5052 H#	LB	1		

WORK STATION	- OPERATIONS -	UNIT	CODE	SET-UP	PIECE RATE
M31 A	Perf & Shear 10 pcs off				
	02-82-07 21 2.8	Ea	S		
Tool	8986-8193 NC Tape				
M76 B	Form				
	02-82-05 24 .5	Ea	S		
M26 C	Osc Sand Face				
	02-83-04 12 .80	Ea	S		
O11 D	Finish per ESFC-2				
E13 E	Mark				
	04-83-04 30 2.50	Ea	S		
Tool	8986-8194 Silkscreen				
N25F	Finish				
	04-84-05 10 1.5	Ea	S		
H82 G	Inspect				
M49 H	Asm, & Swage Inserts				
	02-82-05 5 1.80	Ea	S		
Tool					
P50					

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START DATE:

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ORDER QUAN.
25

DRAFTING NO.

WHERE - USED
2995-4855

DATE

FILE NO.	L
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PAGE

ITEM NUMBER

2995-1888

PRINTS

2995-1888

OFFICE ORDER →

[illegible][illegible]

PARTIAL QUANTITY RECORD

[illegible][illegible]

OPERATION SHEET

DUE DATE:

→	PRINTS 2995-1889	OFFICE ORDER →
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R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
10 1266	AL. 063X36X48 5052 H32 #11 P55	LB	1		.9

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-1890

PRINTS

2995-1890/1

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
10 1266	AL .063X36X48 5052 H32 11# P55	LB	1		.6
5440-0600	Inserts	Ea		10	

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M31 A	Perf. & Shear apart 18 pcs. off				
	02-82-07 31 3.60	Ea	S		
Tool	8986-9414 NC Tapes				
M76 B	Form, Extrude				
	02-82-05 29 2.4	Ea	S		
M49 C	Asm. & Swage Inserts				
	02-82-04 15 2.4	Ea	S		
H82 D	Inspect				
011 E	Finish per ESFC-2				
H30 F	Inspect				
P50					

PARTIAL QUANTITY RECORD

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FROM	TO	NO. OF PCS.	INSP. & DATE	CLOSE SHORT

OPERATION SHEET

START DATE

DUE DATE

ORDER QUAN	DRAFTING NO	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-1891

PRINTS

2995-1891 & 1891/A

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M01 A	Cut to size $\pm .005$ 02-83-06 16 2.55	ea			
M42 B	Perf & Mill 02-82-04 130 44.	ea			
Tool	8986-8174 NC Tape				
M21 C	Osc Sand Face and Bev Edges 02-83-04 12 2.78	ea			
M88 D	Ultrasonic Degrease 04-82-04 5 5.0	ea			
011 E	Finish ESFC-2				
H30 F	Inspect				
N25 G	Finish ESFO-7 04-84-06 25 3.59	ea			
E13 H	Mark 04-84-04 35 4.40	ea			
Tool	8986 Silk Screen				
H82 I	Inspect				
P50					

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OPERATION SHEET

START DATE:

DUE DATE:

ORDER QUAN	DRAFTING NO	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-1893

PRINTS

2995-1893

OFFICE ORDER →

R/M NO	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
10 1286	AL. 090X36X48 5052 H32 15/12 P55	LB			1.84
5440-0600	Insert	Ea		15	

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M31 A	Perf. and shear apart 6 pieces off 02-82-07 129 3.570	Ea	S		
Tool	8986-8176 NC Tape				
M76 B	Form 02-82-05 58 1.00	Ea	S		
M49 C	Tap "J" Holes, Asm. and swage Inserts 02-82-05 15 3.15	Ea	S		
H82 D	Inspect				
011 E	Finish ESFC-2				
H30 F	Inspect				
P50					

PARTIAL QUANTITY RECORD

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OPERATION SHEET

DUE DATE:

→	PRINTS 2995-1903, 2995-1904, 2995-8904	OFFICE ORDER →
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R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
2995-8903	Septum	Ea		1	
2995-8904	Bracket	Ea		1	
1165-1000	End Plate Asm	Ea		2	

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
B70 A	Asm and spot weld						
	02-82-07	15	.30	Ea	S		
Tool	8986-2855 spot weld fixture						
H20 B	Inspect						
P50							

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OPERATION SHEET

DUE DATE:

ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-1982

→	PRINTS	2995-1982	ESPM-200 ESPM-229 ESPM-243	OFFICE ORDER →
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R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		1.4"	
2995-6875	Plug, Coax.	Ea		1	
4220-0210	Plug, Coax.	Ea		1	

[illegible]

PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE:

DUE DATE:

ORDER QUAN. 25	DRAFTING NO.	WHERE-USED 2995-4855	DATE	FILE NO.	L	PAGE	ITEM NUMBER 2995-1983
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→	PRINTS		
	2995-1983	ESPM-243 ESPM-229	OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		4.5"	
4220-0220	Plug, Coax.	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

[illegible]

PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2856

PRINTS

2995-2856 0874-280L
2995-4855-3L 0874-280D

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		7.5"	
0874-4493	Conn. Asm. Panel Locking	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

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START DATE: _____

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2858

PRINTS

2995-2858

2995-4855-3L

ESPM-182

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
33 1210	ESMW-46-2 Cable	Ft		1.5"	
4220-0220	Plug, Coax.	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

DUE DATE: _____

ORDER QUAN	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2859

PRINTS

2995-2859,
0874-280L

2995-4855-3L
0874-280D

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/O	TOT. QUANTITY	UNIT WEIGHT
0033 1210	ESMW-46-2 Cable	Ft		5.5"	
0874-4493	Connector Asm, Locking Panel	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
B73 A	Cut to length, service, form, solder and assemble, mark						
	03-81-04	45	5.5	Ea	S		
Tool	8986-8182 Forming Fixt.						
J16 B	Inspect						
P50							

PARTIAL QUANTITY RECORD

[illegible][illegible]

OPERATION SHEET

DUE DATE:

ORDER QUAN. 25	DRAFTING NO.	WHERE-USED 2995-4860	DATE	FILE NO.	L	PAGE	ITEM NUMBER 2995-2861
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2995-2861

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Wire	Ft		.4'	
4220-0220	Plug, Coax.	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

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PARTIAL QUANTITY RECORD

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START DATE:

DUE DATE:

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2862

PRINTS

2995-2862,

2995-4855-1L

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/O	TOT. QUANTITY	UNIT WEIGHT
33-1210	ESMW-46-2 Cable	Ft		1.5'	
2995-8892	Connect, BNC	ea		1	
1165-6240	Bushing	ea		1	
4220-0220	Plug, Coax.	ea		1	

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2864

PRINTS

2995-2864,

2995-4855-3L

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		4.25"	
1165-6035	Bushing	Ea		2	
1165-6040	Cone	Ea		2	
5305-0138	Solder Form	Ea		2	

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PARTIAL QUANTITY RECORD

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ORDER QUAN. 25	DRAFTING NO.	WHERE-USED 2995-4855	DATE	FILE NO.	L	PAGE	ITEM NUMBER 2995-2865
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PRINTS

2995-2865

2995-4855-4L

ESMP-182

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		2.5'	
4220-0220	Plug, Coax	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE

DUE DATE

ORDER QUAN	DRAFTING NO.	WHERE-USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2866

PRINTS

2995-2866

2995-4855-4L

0874-280-D

0874-280-L

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		7.25"	
0874-4493	Connector Asm, Panel Locking	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
B73 A	Cut to length, service, form solder, Asm cables per dwg. and mark				
	03-81-04 55 7.0	Ea	S		
Tool	8986-8185 Forming Fixt.				
J20 B	Inspect				
P50					

PARTIAL QUANTITY RECORD

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START DATE

DUE DATE:

ORDER QUAN	DRAFTING NO.	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2867

PRINTS

2995-2867,
0874-280D,

2995-4855-4L
0874-280L

OFFICE ORDER.

ESPM-182

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		9.5"	
0874-4493	Connector Asm, Panel, Locking	Ea		1	
4220-0220	Plug, Coax.	Ea		1	

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

DUE DATE

[illegible][illegible][illegible]

OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN. 25	DRAFTING NO.	WHERE-USED 2995-4855	DATE	FILE NO.	L	PAGE	ITEM NUMBER 2995-2869
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PRINTS	2995-4855-4L,	2995-2869
	ESMP-169	

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/O	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		8.0"	
4260-1190	Connector, Bulkhead	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form				

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE

DUE DATE:

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4860					2995-2855

→	PRINTS 2995-2855 ESPM-200, ESPM-243	OFFICE ORDER →
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R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2	Ft		2"	
4220-0210	Plug, Coax.	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

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PARTIAL QUANTITY RECORD

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START DATE:

DUE DATE:

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-2872					2995-2870

PRINTS

2995-2871, 2995-2872-1L

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
1165-8006	End Rail	Ea		2	
1165-8103	Side Rail	Ea		2	
1165-8113	Contact Strip	Ea		2	
1165-8116	End Contact Strip	Ea		2	
2995-8875	Tray Pierced	Ea		1	

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M70 A	Asm and spot-weld per ESPM-151-1 02-82-04 24 5.79	Ea	S		
Tool	8986-2743 Spot weld fixture				
N20 B	Finish per WSPF-1 and ultrasonic clean 1 minute to remove plating fluids 04-81-06 5 .89				
P50					

PARTIAL QUANTITY RECORD

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ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2872

PRINTS

2995-2872, 2995-2872-1L

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
2995-2871	Tray Asm	ea		1	
1165-0401	Eyelet	ea		12	
1165-1811	Contact Strip Asm	ea		1	
1165-1820	Contact Strip Asm	ea		1	
1165-1826	Contact Strip Asm	ea		2	
1165-1830	Contact Strip Asm	ea		1	
1165-1842	Contact Strip Asm - OPERATIONS -	UNIT		SET-UP	PIECE RATE
1165-6020	RF Insert	ea		2	
1165-8770	Capacitor	ea		7	
1165-1020	End Place Asm	ea		1	
1165-1021	End Plate Asm	ea		1	
7110-1495	Screw, cap. .138-32 x .312	ea		2	
5000-1267	Toroid core	ea		7	
B70 A	Asm per ESPM-151-1, 1.0 and 1.1 less soldering and per ESPM-151-2, 5.0 and 5.1 less soldering				
	02-82-04 45 2.05	Ea	S		
Tool	8986-2830 Punch and Anvil				
Tool	8986-2815 Punch and Anvil				
B73 B	Asm per ESPM-151-2, 6.0, 6.1, and 6.4 less solder Solder per ESPM-151-1, 1.1, ESPM-151-2, and 5.1 and 6.1 when above operations are complete, solder per ESPM-151-2, 6.2, and ESPM-151-3, 9.3 Asm per ESPM-151-4, 11.0, 11.1, 11.2 Pack to prevent damage, freon clean and repack				
	02-82-04 35 4.50	Ea	S		
H20 C	Inspect and Repack				
P50					

PARTIAL QUANTITY RECORD

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FROM	TO	NO. OF PCS.	INSP. & DATE	CLOSE SHORT

OPERATION SHEET

DUE DATE

ORDER QUAN	DRAFTING NO.	WHERE-USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-2875					2995-2873

2995-2874, 2995-2875-1L

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
1165-8006	End Rail	Ea		2	
1165-8103	Side Rail	Ea		2	
1165-8113	Side Contact Strip	Ea		2	
1165-8116	End Contact Strip	Ea		2	
2995-8876	Tray Pierced	Ea		1	

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M70 A	Asm and spot weld per ESPM-151-1 02-82-04 24 5.79	Ea	S		
Tool	8986-2843 Spot weld fixture				
N20 B	Finish per ESPF-1 and ultrasonic Clean 1 minute to remove plating fluids 04-81-06 5 .89	Ea	S		
P50					

PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2875

PRINTS

2995-2872, 2995-2875-1L

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
2995-2874	Tray Asm	ea		1	
1165-0401	Eyelet	ea		8	
1165-1811	Contact Strip Asm	ea		1	
1165-1830	Contact Strip Asm	ea		1	
1165-1831	Contact Strip Asm	ea		1	
1165-1835	Contact Strip Asm	ea		1	
1165-6020	RF Insert	ea		2	
4500-7556	Choke, molded 200 uf	ea		2	
4450-6531	Cap, Tant, 4.7 uf	ea		4	
5280-1253	Filter, Elec. L.P. 100 MHZ	ea		8	
1165-1020	End Plate Asm	ea		1	
1165-1021	End Plate Asm.	ea		1	
7110-1495	Screw, Cap. .138-32 X .312	ea		2	
6250-1140	RSTF, film, 1.40K ± 1% 1/8	ea		1	
6250-1221	RSTF, film 2.21K ± 1/8	ea		1	
2995-6880	Insert	ea		8	
7940-0200	Terminal	ea		1	
B70 A	Asm per ESPM-151-1, 1.0 and 1.1 less soldering and per ESPM-151-2, 5.0 and 5.1 less soldering				
	02-82-04 45 2.05	Ea	S		
Tool	8986-2830 Punch and Anvil				
Tool	8986-2815 Punch and Anvil				
B73 B	Asm per ESPM-151-2, 6.0, 6.1 and 6.4 less solder solder per ESPM-151-1, 1.1, ESPM-151-2, 5.1 and 6.1 when above operations are complete, solder per ESPM-151-2, 6.2, and ESPM-151-3, 9.3 Asm per ESPM-151-4, 11.0, 11.1, 11.2 Pack to prevent damage, freon clean and repack				
	02-82-04 35 4.50	Ea	S		
H20 C	Inspect and repack				
P50					

PARTIAL QUANTITY RECORD

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FROM	TO	NO. OF PCS.	INSP. & DATE	CLOSE SHORT

DUE DATE

ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2878

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
2995-2877	Tray Asm	ea		1	
1165-0401	Eyelet	ea		6	
1165-1813	Contact Strip Asm	ea		1	
1165-1828	Contact Strip Asm	ea		1	
1165-1829	Contact Strip Asm	ea		1	
1165-6020	RF Insert	ea		3	
4300-7556	Choke, molded 220 μ H	ea		2	
4450-8531	Cap. Tant. 4.7 μ f	ea		2	
5280-1253	Filter, Elec. L.P. 100 MHz	ea		2	
1165-1020	End Plate Asm.	ea		2	
1165-1021	End Plate Asm.	ea		1	
7110-1495	Screw, Cap. 138-32 x .312	ea		2	
5810-3100	Nut, Hex. 164-32	ea		2	
2995-6880	Insert	ea		2	
B70 A	Asm per ESPM-151-1, 1.0 and 1.1 less soldering and per ESPM-151-2, 5.0 and 5.1 less soldering 02-82-04 45 2.05	Ea	S		
Tool	8986-2830 Punch and Anvil				
Tool 8986	2815 Punch and Anvil				
B73 B	Asm per ESPM-151-2, 6.0, 6.1 and 6.4 less solder Solder per ESPM-151-1, 1.1, ESPM-151-2, 5.1 and 6.1 When above operations are complete, solder Per ESPM-151-2, 6.2, and ESPM-151-3, 9.3 Asm per ESPM-151-4, 11.0, 11.1, 11.2 Pack to prevent damage, freon clean and repack 02-82-04 35 4.50	Ea	S		
H20 C	Inspect and repack				
P50					

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OPERATION SHEET

DUE DATE

ORDER QUAN 25	DRAFTING NO.	WHERE-USED 2995-4855	DATE	FILE NO	L	PAGE	ITEM NUMBER 2995-2879
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PRINTS

2995-2879,
2995-4855-4L ESPM-169

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		12,5"	
4260-1190	Connector, Bulkhead	Ea		1	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
5305-0138	Solder Form	Ea		1	

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-2881					2995-2880

PRINTS

2995-2880, 2995-2881-1L

OFFICE ORDER————→

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
1165-8006	End Rail	Ea		2	
1165-8101	Side Rail	Ea		2	
1165-8111	Side Contact Strip	Ea		2	
1165-8116	End Contact Strip	Ea		2	
2995-8878	Tray pierced	Ea		1	

[illegible]

PARTIAL QUANTITY RECORD

[illegible][illegible]

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2881

PRINTS

2995-2872, 2995-2881-1L

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
2995-2880	Tray Asm	Ea		1	
1165-0401	Eyelet	ea		6	
1165-1813	Contact Strip Asm	ea		1	
1165-1828	Contact Strip Asm	ea		1	
1165-1830	Contact Strip Asm	ea		1	
1165-6020	RF Insert	ea		4	
4300-7556	Choke, molded 220 μ f	UNIT		2	
4350-6531	Cap, Tant. 4.7 μ f	ea		2	
5280-1253	Filter, Elec. L.P. 100 MHz	ea		2	
1165-1020	End Plate Asm.	ea		1	
1165-1021	End Plate Asm.	ea		1	
7110-1495	Screw, Cap. 138-32 X .312	ea		2	
5810-3100	Nut, Hex .164-32	ea		2	
2995-6880	Insert	ea		2	
B70 A	Asm per ESPM-151-1, 1.0 and 1.1 less soldering and per ESPM-151-2, 5.0 and 5.1 less soldering 02-82-04 45 2.05	Ea	S		
Tool	8986-2830 Punch and Anvil				
Tool	8986-2815 Punch and Anvil				
B73 B	Asm per ESPM-151-2, 6.0, 6.1, and 6.4 less solder Solder per ESPM-151-1, 1.1, ESPM-151-2, 5.1, and 6.1 When above operations are complete, solder per ESPM-151-2, 6.2, and ESPM-151-3, 9.3 Asm per ESPM-151-4, 11.0, 11.1, 11.2 Pack to prevent damage, freon clean and repack 02-82-04 35 4.50	Ea	S		
H20 C	Inspect and repack				
P50					

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OPERATION SHEET

DUE DATE

→	PRINTS	2995-2886, 2995-2887-1L	OFFICE ORDER →
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R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
1165-8006	End Rail	Ea		2	
1165-8103	Side Rail	Ea		2	
1165-8113	Side Contact Strip	Ea		2	
1165-8115	End Contact Strip	Ea		2	
2995-8879	Tray Pierced	Ea		1	

WORK STATION	- OPERATIONS -			UNIT	CODE	SET-UP	PIECE RATE
M70 A	Asm and spot weld per ESPM-151-1						
	02-82-04	24	5.79	Ea	S		
Tool	8986-2814 Spot Weld Fixture						
Tool	8986-5563 Spot Weld Fixture						
N20 B	Finish per ESFP-1 and ultrasonic clean 1 minute to remove plating fluids						
	04-81-06	5	.89	Ea	S		
P50							

PARTIAL QUANTITY RECORD

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START DATE: _____

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2887

PRINTS

2995-2887,

2995-2887-1L

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
2995-2886	Tray Asm	ea		1	
1165-0401	Eyelet	ea		12	
1165-1849	Contact Strip Asm	ea		1	
1165-1852	Contact Strip Asm	ea		1	
2995-1840	Contact Strip Asm	ea		2	
2995-1841	Contact Strip Asm	ea		1	
2995-1850	Contact Strip Asm - OPERATIONS -	UNIT		SET-UP	PIECE RATE
1165-0020	RF Insert	ea		2	
1165-8770	Capacitor	ea		6	
4300-7556	Choke, molded 220 μ H \pm 10%	ea		2	
4450-6531	Cap., Tant. 4.7 μ G, \pm 20%, 25V	ea		2	
5280-1253	Filter, Elec, L.P. 100MHz	ea		2	
5810-3100	Nut, Hex. 164-32	ea		2	
7110-1495	Screw, Cap .138-32 X .312	ea		2	
2995-1903	Septum Asm	ea		1	
2995-6880	Insert	ea		2	
7940-0600	Terminal	ea		2	
B70 A	Asm per ESPM-151-1, 1.0 and 1.1 less soldering and per ESPM-151-2, 5.0 and 5.1 less soldering				
	02-82-04 45 2.05	Ea	S		
Tool	8986-2830 Punch and Anvil B70				
Tool	8986-2815 Punch and Anvil B70				
B73 B	Asm per ESPM-151-2, 6.0, 6.1, and 6.4 less solder Solder per ESPM-151-1, 1.1, ESPM-151-2, 5.1 and 6.1 When above operations are complete, solder per ESPM-151-2, 6.2, and ESPM-151-3, 9.3 Asm chokes, caps, and filters Asm per ESPM-151-4, 11.0, 11.1, 11.2 Pack to prevent damage Freon clean and repack				
	02-82-04 35 4.50	Ea	S		
H20 C	Inspect and repack				
P50					

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FROM	TO	NO. OF PCS.	INSP. & DATE	CLOSE SHORT

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OPERATION SHEET

START DATE

DUE DATE Page 1

ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
		2995-4855					2995-2890

PRINTS 2995-2890-1L 2995-4855-5L
2995-2890

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
10 1315	AL .125X36X48 3003 H14	\$/50	IN	1561 lbs	11 2000
10 1286	AL .090X36X48 5052 H32	\$/50	IN	16	1 15
5440-4430	Insert Tapped	Ea		4	
5860-0503	Pad, Tapping	Ea		4	

WORK STATION	- OPERATIONS -	UNIT	Q O E	SET-UP	PIECE RATE
M25 A	Shear to size 02-82-05 36 .328	Ea	S		
M01 B	Slot 02-83-06 16 .550	Ea	S		
M31 C	Perf. & Shear - 8895, 8896, 8897 02-82-07 21 .150	Ea	S		
Tool	8986-5943 NC TAPE 8895				
Tool	8986-5993 NC TAPE 8896				
M02 D	C'Bore "E" holes 02-83-04 10 2.0	Ea	S		
M76 E	Form - 8895, & 8896 02-82-05 15 .25	Ea	S		
M88 F	Clean per ESPM-40 04-82-04 5 3.00	Ea	S		
M90 G	Asm. & weld 2995-2890 and square up 02-82-05 50 20.00	Ea	S		
M26 H	Blend corner weld, grind, & file inside & outside edge and gage open end 02-83-07 20 15.00	Ea	S		
M49 I	Asm. & Swage Insert 02-82-04 10 .10	Ea	S		
M02 J	Drill & Tap "C" holes 02-83-04 5 .25	Ea	S		
Tool	8986-5944 Drill Fixt.				
Tool	Ultrasonic Degrease				

PARTIAL QUANTITY RECORD

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FROM	TO	NO. OF PCS.	INSP. & DATE	CLOSE BOOK

OPERATION SHEET

DUE DATE: _____ Page 2

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OPERATION SHEET

DUE DATE

ORDER QUAN	DRAFTING NO.	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2891

2995-4855-5L
2995-2891

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
7890-6202	Switch, wafer Rotary	Ea		1	
6010-2200	Pot 500Kr	Ea		1	
6250-0287	Resistor 287r	Ea		1	
6250-0499	Resistor 499r	Ea		1	
6250-1158	Resistor 1.58r	Ea		1	
ESMW-30-20	Wire	Ft		1	

5810	581000	Nut, Hex .375-32, 500 Br	UNIT	1	SET-UP	1	PIECE RATE
805	805000	Washer, Lock Int'l tooth, .375 Np	UNIT	1	SET-UP	1	PIECE RATE

[illegible]

J20 B	Inspect
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P50

PARTIAL QUANTITY RECORD

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DUE DATE: _____

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OPERATION SHEET

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2893

PRINTS

2995-2893, -4855-3L ESPM-182

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0033-1210	ESMW-46-2 Cable	Ft		3.5"	
1165-6035	Bushing	Ea		1	
1165-6040	Cone	Ea		1	
4220-0220	Plug, Coax.	Ea		1	
5305-0138	Solder Form	Ea		1	

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PARTIAL QUANTITY RECORD

[illegible][illegible]

OPERATION SHEET

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2894

PRINTS

2995-4855-7L
2995-2894

OFFICE ORDER →

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE:

DUE DATE

ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-2897

PRINTS

2995-2897

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
10-1266	AL .063 ± .006, 5052-H32 P55	LB			.02
5167-4045	PAD	Ea		1	

WORK STATION	- OPERATIONS -			UNIT	CODE	SET-UP	PIECE RATE
M49 A	Perf & Form						
	02-82-05	30	3.2				
M88 B	Degrease						
	04-82-04	5	.70				
M49 C	Cement Pad						
	02-82-04	5	.72				
P50							

PARTIAL QUANTITY RECORD

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OPERATION SHEET

DUE DATE:

ORDER QUAN	DRAFTING NO.	WHERE-USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-4850

PRINTS

2995-4850, 2995-4855-6L

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
A75 A	Assemble complete & mark 03-81-06 15 29.0	Ea	S		
L01 B	Test and calibrate 01-82-08 15 15.0	Ea	S		
J20 C	Inspect				
P50					

PARTIAL QUANTITY RECORD

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OPERATION SHEET

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4860					2995-6850

PRINTS

2995-6850

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
M85 A	Machine OD & ID						
	02-83-05	35	.77	Ea	S		
N20 B	Finish						
	04-81-06	5	.89	Ea	S		
H82 C	Inspect						
P50							

PARTIAL QUANTITY RECORD

[illegible][illegible]

OPERATION SHEET

DUE DATE:

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4855					2995-6852

PRINTS

OFFICE ORDER →

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE:

DUE DATE:

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2994-4765					2995-6855

PRINTS

2995-6855

OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M01 A	Saw to size				
	02-83-06 10 .20	Ea	S		
M02 B	Drill				
	02-83-04 5 .15	Ea	S		
M37 C	Turn to size				
	02-83-06 12 .30	Ea	S		
M88 D	Degrease				
	04-82-04 5 .01	Ea	S		
N20 E	Plate per ESFP-1				
	04-81-06 5 8.00	Ea	S		
H82 F	Inspect				
P50					

PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN	DRAFTING NO.	WHERE-USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
		2995-2899					2995-6870

PRINTS

2995-4855-7L

2995-6870

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
12-1380	BRS .091 x 12 x 72 260 1/2 H	LB			.18

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M01 A	Saw to size Finish edges 02-83-06 16 1.3				
M02 B	Drill & Burr 02-82-05 15 1.8				
N20 C	Finish ESFP-24 04-81-06 10 10				
P50					

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OPERATION SHEET

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-7860

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
4320-1100	Cable Holder, Quadruple	Ea.			

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DUE DATE

ORDER QUAN	DRAFTING NO.	WHERE - USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
		2995-2894					2995-7884

PRINTS

2995-7884

OFFICE ORDER-

[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
M31 A	Shear	02-82-07	15	.8			
M02 B	Drill	02-83-05	15	1.8			
P50							

PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN. 25	DRAFTING NO.	WHERE-USED 2995-4855	DATE	FILE NO.	L	PAGE	ITEM NUMBER 2995-8840
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PRINTS

2995-8840

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
10 4460	AL 3" Dia 2011-73	LB			.2

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M01 A	Saw to size				
	02-83-06 16 .55	Ea	S		
M80 B	Perf. & C'Bore (spot face)				
	02-83-06 90 2.10	Ea	S		
M88 C	Ultrasonic Degrease				
	04-82-04 5 5.00	Ea	S		
N25 D	Finish				
	04-84-05 11 .25	Ea	S		
E12 E	Engrave & Fill				
	04-83-04 30 1.50	Ea	S		
H82 F	Inspect				
P50					

PARTIAL QUANTITY RECORD

FROM	TO	NO. OF PCS.	INSP. & DATE	CLOSE SHORT

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OPERATION SHEET

DUE DATE:

ORDER QUAN. 25	DRAFTING NO.	WHERE-USED 2995-2872	DATE	FILE NO.	L	PAGE	ITEM NUMBER 2995-8875
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2995-8875 & 2995-8875A

OFFICE ORDER.

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
12 1016	Brs .016X24X36 CDA 260 1/2H	LB			1 .25

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OPERATION SHEET

DUE DATE:

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DUE DATE _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-2878					2995-8877

PRINTS

2995-8887A

2995-8875

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
12 1016	Brs. .016X24X36 CDA 260 1/2 H	LB			1 25

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M31 A	Perf. Osc sand, Remove burrs & shear apart				
	02-82-07 30 .25	Ea	S		
Tool	8986-8189 NC TAPE				
M49 B	Stamp O				
	02-82-04 15 .20	Ea	S		
M02 C	Open .172 holes to .196				
	02-83-05 3 .06	Ea	S		
M88 D	Ultrasonic Degrease				
M30 E	Form				
	02-82-05 5 2.00	Ea	S		
Tool	8986-2186 Die Set				
Tool	8986-2842 Panel D				
M88 F	Clean per ESPM-40				
	04-82-04 5 2.00	Ea	S		
P50					

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DUE DATE

ORDER QUAN 25	DRAFTING NO.	WHERE-USED 2995-2881	DATE	FILE NO.	L	PAGE	ITEM NUMBER 2995-8878
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2995-8878A

2995-8875

OFFICE ORDER —

[illegible]

WORK STATION	- OPERATIONS -				UNIT	C O D E	SET-UP	PIECE RATE
M31 A	Perf. Osc Sand, Remove burrs, & Shear apart							
	02-82-07	30		.25	Ea	S		
Tool	8986-8190 NC TAPE							
M49 B	Stamp 0							
	02-82-04	15		.20	Ea	S		
MO2 C	Open .172 Holes to .196							
M88 D	Ultrasonic Degrease							
	04-82-04	5		2.00	Ea	S		
M30 E	Form							
	02-82-05	30		.22	Ea	S		
Tool	8986-2186							
Tool	8986-2842							
M88 F	Clean per ESPM-40							
	04-82-04	5		2.00	Ea	S		
P50								

PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE

DUE DATE

ORDER QUAN	DRAFTING NO.	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-2887					2995-8879

PRINTS

2995-8879, 2995-8879A

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
12 1016	Brs. .016X24X36 CDA 260 1/2H	LB			1 25

WORK STATION	- OPERATIONS -	UNIT	C O D E	SET-UP	PIECE RATE
M31 A	Perf. Osc Sand Remove				
	Burrs, shear apart				
	02-82-07 30 .25	Ea	S		
Tool	8986-8191 NC TAPE				
M49 B	Stamp O				
	02-82-04 15 .20	Ea	S		
MO2C	Open .172 holes to .196				
M88 D	Ultrasonic Degrease				
	04-82-04 5 2.00	Ea	S		
M30 E	Form				
	02-82-05 30 .22	Ea	S		
Tool	8986-2133 Die Set				
Tool	8986-2156 Panel D				
M88 F	Clean per ESPM-40				
	04-82-04 5 2.00	Ea	S		
P50					

PARTIAL QUANTITY RECORD

FROM	TO	NO. OF PCS.	INSP. & DATE	CLOCK SHOOT

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OPERATION SHEET

START DATE

DUE DATE

ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4860					2995-8880

PRINTS

2995-8880

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
0012-1500	.125 Brass 260 1/2 H	LB		3LBS	.73

WORK STATION	- OPERATIONS -				UNIT	CODE	SET-UP	PIECE RATE
MO1 A	Saw to size	02-83-06	16	.55	Ea	S		
MO2 B	Drill & Burr	02-83-04	37	1.65	Ea	S		
Tool	8986-8199 Drill Fixture							
M40 C	Mill skim cut to flatten	02-83-06	60	4.50	Ea	S		
N20 D	Finish	04-81-06	5	14.89	Ea	S		
H82 E	Inspect							
P50								

PARTIAL QUANTITY RECORD

FROM	TO	NO. OF PCS.	INSP. & DATE	CLOCK SHOOT

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OPERATION SHEET

START DATE

DUE DATE

ORDER QUAN 25	DRAFTING NO	WHERE USED 2995-4860	DATE	FILE NO	L	PAGE	ITEM NUMBER 2995-8881
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PRINTS

2995-8880

OFFICE ORDER

[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
M01 A	Saw to size						
	02-83-06	16	.55	Ea	S		
M02 B	Drill and Burr						
	02-83-04	37	1.50	Ea	S		
Tool	8986-8199 Drill Fixture						
M40 C	Mill skim cut to flatten						
	02-83-06	60	4.50	Ea	S		
N20 D	Finish						
	04-81-06	5	14.89	Ea	S		
H82 E	Inspect						
P50							

PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE

DUE DATE

ORDER QUAN	DRAFTING NO	WHERE USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4860					2995-8882

PRINTS

2995-8882

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
	.75 X 3.0 Brass, 260, 1/2H	LB			

WORK STATION	- OPERATIONS -			UNIT	CODE	SET-UP	PIECE RATE
M01 A	Saw to size 3.0 X 6.0						
	02-83-06	16	3.50	Ea	S		
M89 B	Stress relieve at 850° for 1 hr						
	04-82-04	15	60.00	Ea	S		
M40 C	Mill to dimensions 5.980± 015X2.830±.015						
	X.690±.010						
	.000						
	02-83-06	10	6.50	Ea	S		
M42 D	Mill						
	02-83-07	390	7.00	Ea	S		
Tool	8986-8200 NC TAPE						
Tool	8986-2836 ID Form Tool						
Tool	8986-2881 ID Form Tool						
N20 E	Finish						
	04-81-06	5	14.89	Ea	S		
H82 F	Inspect						
P50							

PARTIAL QUANTITY RECORD

FROM	TO	NO. OF PCS.	INSP. & DATE	CLOCK SHOOT

FROM	TO	NO. OF PCS.	INSP. & DATE	CLOCK SHOOT

OPERATION SHEET

START DATE

DUE DATE:

DRAFTING NO

WHERE - USED
2995-4855

DATE

FILE NO	L
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PAGE

ITEM NUMBER
2995-8885

PRINTS

2995-8885

OFFICE ORDER—————

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE:

DUE DATE:

ORDER QUAN	DRAFTING NO	WHERE - USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-8891

PRINTS

2995-8891

OFFICE ORDER →

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PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE:

DUE DATE:

ORDER QUAN 25	DRAFTING NO	WHERE-USED 2995-2862		DATE	FILE NO.	L	PAGE	ITEM NUMBER 2995-8892
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PRINTS

2995-4855-1L

2995-8892

OFFICE ORDER

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
4230-2350	connector	Ea.		1	

[illegible]

PARTIAL QUANTITY RECORD

[illegible][illegible]

OPERATION SHEET

START DATE:

DUE DATE:

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO	L	PAGE	ITEM NUMBER
25		2995-4855					2995-8894

PRINTS

2995-8894

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
13 1230	.012X64 Nos H Proosphor Braze	LB			.006

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
M25 A	Shear to size 3.522X.312						
	02-82-05	20	.30	Ea	S		
M49 B	Perf. & Form						
	02-82-05	30	1.32	Ea	S		
Tool	8986-8197 Forming Fixt.						
N20 C	Finish per ESFC-10						
	04-81-06	5	.89	Ea	S		
H82 D	Inspect						
P50							

PARTIAL QUANTITY RECORD

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OPERATION SHEET

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2995-4781					2995-8900

2995-8900/1

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT QUANTITY	UNIT WEIGHT
	Brass 260 1/2 .020 \pm .002	LB			002

WORK STATION	- OPERATIONS -			UNIT	CODE	SET-UP	PIECE RATE
M31 A	Perf. & shear apart						
	02-82-07	80	2.50	ea	S		
M76 B	Form						
	02-82-05	36	.50	ea	S		
M88 C	Cold Ultrasonic degrease						
N20 D	Plate per dwg.						
	04-81-06	5	9.00	ea	S		
P50							

PARTIAL QUANTITY RECORD

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OPERATION SHEET

DUE DATE: _____

→ PRINTS 2995-8904 OFFICE ORDER →

[illegible]

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
M25 A	Shear to size						
	02-82-05	36	.328	Ea	S		
M76 B	Form						
	02-82-05	24	.160	Ea	S		
M88 C	Degrease						
	04-82-04	10	.150	Ea	S		
N20 D	Finish per GR spec ESFP-1						
	04-81-06	5	.894	Ea	S		
H82 E	Inspect						
P50							

PARTIAL QUANTITY RECORD

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OPERATION SHEET

START DATE: _____

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE-USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
25		2994-4781					2995-8906

PRINTS

2995-8906

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
6070-0410	Heat Sink	ea		1	

[illegible]

PARTIAL QUANTITY RECORD

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START DATE: _____

DUE DATE: _____

ORDER QUAN.	DRAFTING NO.	WHERE USED	DATE	FILE NO.	L	PAGE	ITEM NUMBER
		2995-4855					2995-8909

PRINTS

2995-8909

OFFICE ORDER →

R/M NO.	RAW MATERIAL DESCRIPTION	UNIT	I/D	TOT. QUANTITY	UNIT WEIGHT
16-1455	.312 CR Steel	LB			.03

WORK STATION	- OPERATIONS -			UNIT	C O D E	SET-UP	PIECE RATE
M01 A	Cut to length						
	02-83-06	12	.75				
M49 B	Form						
	02-82-05	18	2.4				
M40 C	Mill						
	02-82-07	25	3.5				
N20 D	Finish ESFP-5						
	04-81-06	12	.75				
P50							

PARTIAL QUANTITY RECORD

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FROM	TO	NO. OF PCS.	INSP. & DATE	CLOSE SHORT